

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An optical module comprising:

a housing having a lower casing ~~including~~ integrating with a receptacle for mating with an optical connector[[,]] and a mount[[:]] , an upper casing being engaged with the lower casing; and a cover for covering the upper casing;

a block mounted on the lower casing;

an optical sub-assembly having leads and mounted on the block, the optical sub-assembly being optically coupling coupled with the optical connector ~~in~~ mated with the receptacle; and

~~a circuit board~~ substrate mounted on the mount of the lower casing and held by the block,
the substrate being electrically connected to the leads of the optical sub-assembly, and mounted
~~on the mount of the lower casing; and~~

wherein the block holds the optical sub-assembly and substrate, and defines relative positions of the lower casing and the upper casing

~~a block, mounted on the lower casing, for defining relative positions of the lower casing, upper casing, optical sub-assembly, and circuit board.~~

2. (Cancelled)

3. (Currently Amended) ~~An~~ The optical module according to claim 1 2,

wherein the block ~~further comprises~~ includes a mounting portion for mounting the optical sub-assembly, a ~~holding~~ substrate supporting portion for ~~holding~~ supporting the substrate circuit board, and a substrate pressing portion for pressing substrate, the substrate supporting portion

and the substrate pressing portion holding the substrate by sandwiching the substrate therebetween the circuit board;

~~wherein the optical sub-assembly is mounted to the mounting portion, a leading end of the optical sub-assembly being inserted into the opening formed in the one surface; and~~

~~wherein the circuit board is held between the holding portion and pressing portion.~~

4. (Currently Amended) The ~~An~~ optical module according to claim 3, wherein the block further ~~comprises~~ includes a center wall and a pair of side walls disposing the center wall therebetween; ~~and,~~

~~wherein the mounting portion is disposed between the center wall and one side wall; and~~

~~wherein the center wall is provided with~~ providing the holding substrate supporting portion[[,]] and each of the pair of side walls being provided with providing the substrate pressing portion.

5. (Currently Amended) The ~~An~~ optical module according to claim 14 2,

wherein the lower casing has a projection on ~~at~~ the mount[[,]] for holding the block being held between a side face of the projection and the abutment surface of the receptacle such that the surface of the block abuts against the surface of the receptacle.

6. (Currently Amended) The ~~An~~ optical module according to claim 14 2, wherein the block provides a first cutout[[;]] , ~~wherein~~ the lower casing provides a second

cutout[[;]] , ~~and wherein~~ the upper casing provides first and second protrusions for engaging with the first and second cutouts, respectively; ~~and~~

~~wherein the first and second protrusions engage with the first and second cutouts, respectively, so such that one the surface of the block abuts and the abutment surface of the receptacle lower casing come into contact with each other.~~

7. (Currently Amended) The ~~An~~ optical module according to claim 6, wherein the block ~~further comprises~~ includes a mounting portion for mounting the optical device, a center wall, and a pair of side walls for providing the first cutout, the side walls disposing the center wall therebetween[[;]] , ~~wherein~~ the mounting portion is being disposed between the center wall and one side wall; ~~and~~

~~wherein the first cutout is formed in the side wall.~~

8. (Currently Amended) The ~~An~~ optical module according to claim 6, wherein the second cutout is formed in a side wall of the lower casing.

9. (Currently Amended) The ~~An~~ optical module according to claim 14 2, wherein the upper casing ~~further comprises~~ includes a projection and the block includes a center wall with a cutout,[[;]]

~~wherein the block further comprises a center wall and a pair of side walls disposing the center wall therebetween;~~

~~wherein the center wall provides a cutout; and~~

~~wherein a side wall of the projection and being in contact with a cross section of the cutout such that the surface of the block abuts against the surface of the receptacle come into contact with each other.~~

10. (Currently Amended) The ~~An~~ optical module according to claim 14 ~~1~~, further comprising a holder for holding the optical sub-assembly[[;]]
~~wherein the block further comprises a pair of side walls;~~
~~wherein a concavity is formed in an inner face of the pair of side walls;~~
~~wherein the holder surrounds the outside of~~ for surrounding the optical sub-assembly; ~~and~~
~~wherein a leading end of such that the holder is inserted into the concavity so as to hold~~
holds the optical sub-assembly with respect to the block.

11. (Currently Amended) The ~~An~~ optical module according to claim 1, wherein the block is made of a resin.

Claim 12 and 13. (Cancelled)

14. (New) The optical module according to claim 1,
wherein the receptacle of the lower casing has a surface with an opening for abutting against a surface of the block with an opening corresponding to the opening provided in the surface of the receptacle, the optical sub-assembly passing the opening of the surface of the receptacle and the opening of the block therethrough.

15. (New) An optical module comprising:

an optical sub-assembly having leads and mounted with an optical device;

a substrate electrically connected to the leads of the optical sub-assembly;

a resin block including a front wall with an opening to pass one end of the optical sub-assembly therethrough, a center wall with a substrate supporting portion and a first cutout, and a pair of side walls disposing the center wall therebetween, each of the side walls providing a substrate pressing portion for pressing the substrate and a second cutout, the substrate supporting portion and the substrate pressing portion holding the substrate by sandwiching the substrate therebetween;

a lower casing having a receptacle for receiving an optical connector holding an optical fiber and a mount for mounting the substrate, the receptacle providing a surface with an opening for passing the one end of the optical sub-assembly therethrough, the mount providing a projection for sandwiching the block with the surface of the receptacle such that the front wall of the block abuts against the surface of the receptacle, the lower casing providing a third cutout in a side wall thereof; and

an upper casing providing a first protrusion to engage with the first cutout provided in the side wall of the resin block, a second protrusion to engage with the third cutout provided in the side wall of the lower casing, and a third protrusion to engage with the second cutout provided in the center wall of the resin block such that the front wall of the resin block abuts against the surface of the receptacle.

16. (New) A method for manufacturing an optical module including an optical sub-assembly, a block, a substrate, a lower casing and an upper casing, the method comprising steps of:

(a) mounting the optical sub-assembly on the block such that a leading end of the optical sub-assembly passes an opening provided in a front wall of the block therethrough;

(b) securing the substrate to the block such that a substrate supporting portion provided in a center wall of the block and a substrate pressing portion provided in a side wall of the block sandwiches the substrate therebetween;

(c) electrically connecting the substrate with leads of the optical subassembly;

(d) installing the block mounting the optical sub-assembly connected with the substrate into the lower casing including a receptacle such that the leading end of the optical subassembly passing the opening of the block enters an opening formed in a surface of the receptacle; and

(e) securing the upper casing with the lower casing such that the front wall of the block abuts against the surface of the receptacle.